WORLD GEOGRAPHY

Students use and evaluate maps, globes, graphs and information technology as they study global patterns of physical and cultural characteristics. Students are expected to apply knowledge of geographic concepts to research, inquiry and participatory processes. Standards are organized around five elements: the world in spatial terms, places and regions, physical systems, human systems, and environment and society.

At the high school level, Indiana's academic standards for social studies provide standards for specific courses that focus on one of the five content areas that make up the core of the high school social studies curriculum: history; government; geography; economics; and individuals, society and culture (psychology, sociology and anthropology). One of these content areas is the major focus of the course while the other areas play supporting roles or become completely integrated into the subject matter. Supporting content areas are indicated in parentheses. Each high school course continues to develop skills for thinking, inquiry and research, and participation in a democratic society.

Standard 1 — The World in Spatial Terms

Students will acquire a framework for examining the world in spatial terms. They will use and evaluate maps, globes, atlases and grid-referenced technologies, such as remote sensing, Geographic Information Systems (GIS) and Global Positioning Systems (GPS), to acquire, evaluate, analyze and report information about people, places and environments on Earth's surface.

Standard 2 — Places and Regions

Students will acquire a framework for thinking geographically about places and regions. They will identify the physical and human characteristics of places and regions. They will understand that people create regions to interpret Earth's complexity, and how culture and experience influence people's perception of places and regions.

Standard 3 — Physical Systems

Students will acquire a framework for thinking geographically about Earth's physical systems. They will explain the physical processes that shape the patterns of Earth's surface and the characteristics and spatial distribution of ecosystems on Earth's surface.

Standard 4 — Human Systems

Students will acquire a framework for thinking geographically about human activities that shape Earth's surface. They will examine the characteristics, distribution and migration of human populations on Earth's surface; investigate the characteristics, distribution and complexity of Earth's cultural mosaics; analyze the patterns and networks of economic interdependence on Earth's surface; examine the processes, patterns and functions of human settlement; and consider how the forces of cooperation and conflict among people influence the division and control of Earth's surface.

Standard 5 — Environment and Society

Students will acquire a framework for thinking geographically about the environment and society. They will analyze ways in which humans affect and are affected by their physical environment and the changes that occur in the meaning, distribution and importance of resources.

Standard 1 The World in Spatial Terms

Students will acquire a framework for examining the world in spatial terms. They will use and evaluate maps, globes, atlases and grid-referenced technologies, such as remote sensing, Geographic Information Systems (GIS)* and Global Positioning Systems (GPS)*, to acquire, evaluate, analyze and report information about people, places and environments on Earth's surface.

- WG.1.1 Explain Earth's grid system and locate places using degrees of latitude and longitude. Use Earth's grid to examine important human issues, such as where particular crops can be grown and what animals can be domesticated in particular areas.
- WG.1.2 Demonstrate that, as an attempt to represent the round Earth on flat paper, all maps distort. Be able to evaluate distortions associated with any given projection.
- WG.1.3 Evaluate the source of particular maps to determine possible biases contained in them.
- WG.1.4 Create and compare mental maps or personal perceptions of places. Explain how experiences and culture influence these perceptions and identify ways in which mental maps influence decisions. (Individuals, Society and Culture)
- WG.1.5 Use locational technology such as remote sensing, Global Positioning Systems (GPS) and Geographic Information Systems (GIS), to establish spatial relationships.

Example: Use GIS to examine the spatial relationship between pollution and infant mortality.

WG.1.6 Evaluate the applications of geographic tools (locational technologies) and supporting technologies to serve particular purposes.

Example: Assess the role played by maps in the exploration of Polar Regions.

- WG.1.7 Ask geographic questions* and obtain answers from a variety of sources, such as books, atlases and other written materials; statistical source material; fieldwork and interviews; remote sensing; and GIS. Reach conclusions and give oral, written, graphic and cartographic expression to conclusions.
 - * Global Positioning Systems (GPS): systems of satellites and ground stations used to locate precise points on the surface of Earth

- * Geographic Information Systems (GIS): information technology systems used to store, analyze, manipulate and display a wide range of geographic information
- * geographic question: a question that asks "Where?" and "Why there?"

Standard 2 Places and Regions*

Students will acquire a framework for thinking geographically about places and regions. They will identify the physical and human characteristics of places and regions. They will understand that people create regions to interpret Earth's complexity, and how culture and experience influence people's perception of places and regions.

- WG.2.1 Name and locate the world's continents, major bodies of water, major mountain ranges, major river systems, all countries and major cities.
- WG.2.2 Give examples of how and why places and regions change or do not change over time.

Example: Changing settlement patterns in the American Southwest, the impact of technology on the growth of agricultural areas, and the changing location of manufacturing areas

WG.2.3 Give examples and analyze ways in which people's changing views of places and regions reflect cultural changes.

Example: The migration from urban cores to suburbs and the subsequent revitalization of these urban cores

- WG.2.4 Explain how the concept of "region" is used as a way of categorizing, interpreting and ordering complex information about Earth.
- WG.2.5 Give examples of how people create regions to understand Earth's complexity. (Individuals, Society and Culture)

Example: "Midwest," "Middle East" and "Kentuckiana"

* regions: areas that have common characteristics. Some regions have finite or absolute boundaries, such as political units like a country, state or school district. Some regions have blurred boundaries, such as crop or climate regions or a region based on primary language. Regions also can be entirely perceptual. An example is the "Midwest," where boundaries vary widely according to people's perceptions.

Standard 3 Physical Systems

Students will acquire a framework for thinking geographically about Earth's physical systems. They will explain the physical processes that shape the patterns of Earth's surface and the characteristics and spatial distribution of ecosystems on Earth's surface.

- WG.3.1 Define Earth's physical systems: atmosphere*, lithosphere*, biosphere* or hydrosphere*. Categorize the elements of the natural environment as belonging to one of the four components.
- WG.3.2 Identify and account for the distribution pattern of the world's climates, taking into account the Earth/Sun relationship, ocean currents, prevailing winds, and latitude and longitude.
- WG.3.3 Describe the world patterns of natural vegetation and biodiversity and their relations to world climate patterns.

Example: Rainforests, savannahs and tundra

WG.3.4 Explain and give examples of the physical processes that shape Earth's surface that result in existing landforms and identify specific places where these processes occur.

Example: Plate tectonics, mountain building, erosion, deposition

- WG.3.5 Illustrate and graph with precision the occurrence of earthquakes on Earth over a given period of time (at least several months) and draw conclusions concerning regions of tectonic instability.
 - * atmosphere: the gases and other materials that surround Earth and are held close by gravity
 - * lithosphere: the uppermost portion of the solid Earth, including soil, land and geologic formations
 - * biosphere: the realm of Earth which includes all plant and animal life forms
 - * hydrosphere: the water realm of Earth which includes water contained in the oceans, lakes rivers, ground, glaciers and water vapor in the atmosphere

Standard 4 Human Systems

Students will acquire a framework for thinking geographically about human activities that shape Earth's surface. They will examine the characteristics, distribution and migration of human populations on Earth's surface; investigate the characteristics, distribution and complexity of Earth's cultural mosaics; analyze the patterns and networks of economic interdependence on Earth's surface; examine the processes, patterns and functions of human settlement; and consider how the forces of cooperation and conflict among people influence the division and control of Earth's surface.

Characteristics, Distribution and Migration of Human Populations

- WG.4.1 Using maps, establish world patterns of population distribution, density and growth. Relate population growth rates to health statistics, food supply or measure of well-being. Explain that population patterns differ not only among countries but also among regions within a single country. (Economics; Government; Individuals, Society and Culture)
- WG.4.2 Develop maps of human migration and settlement patterns at different times in history and compare them to the present. (Government; History; Individuals, Society and Culture)
- WG.4.3 Hypothesize about the impact of push factors* and pull factors* on human migration in selected regions and about changes in these factors over time. (Economics; Government; History; Individuals, Society and Culture)
- WG.4.4 Evaluate the impact of human migration on physical and human systems. (Economic; Government; Individuals, Society and Culture)

Example: Latino migration into the United States and Arab migration into Western Europe

WG.4.5 Assess the consequences of population growth or decline in various parts of the United States and determine whether the local community is shrinking or growing.

Characteristics, Distribution and Complexity of Cultural Mosaics

- WG.4.6 Map the distribution patterns of the world's major religions and identify cultural features associated with each. (History; Individuals, Society and Culture)
 - **Example:** Buddhist and Hindu temples, Christian cathedrals and chapels, Islamic mosques and Jewish synagogues
- WG.4.7 Map the distribution pattern of the world's major languages. Map and explain the concept of a lingua franca* in various parts of the world. (History; Individuals, Society and Culture)

Example: English, Chinese, Spanish, French and Arabic languages; English as the language of business

WG.4.8 Explain how changes in communication and transportation technology contribute to the spread of ideas and to cultural convergence* and divergence*. (Individuals, Society and Culture)

Economic Interdependence (Globalization)

- WG.4.9 Identify patterns of economic activity in terms of primary (growing or extracting), secondary (manufacturing) and tertiary (distributing and services) activities. Plot data and draw conclusions about how the percentage of the working population in each of these categories varies by country and changes over time.
- WG.4.10 Describe and locate on maps the worldwide occurrence of the three major economic systems traditional, planned and market and describe the characteristics of each. (Economics)
- WG.4.11 Compare the levels of economic development of countries of the world in terms of Gross Domestic Product per capita and key demographic and social indicators. Map and summarize the results.
- WG.4.12 Explain the meaning of the word infrastructure* and analyze its relationship to a country's level of development. (Economics; Government; Individuals, Society and Culture)
- WG.4.13 Identify contemporary spatial patterns in the movement of goods and services throughout the world.
- WG.4.14 Describe and illustrate the economic interdependence of countries and regions. (Economics)

Example: Use a flow chart and maps to show the movement of oil from producers to consumers.

WG.4.15 Assess the growing worldwide impact of tourism and recreation and explain the economic, social and political effects of these activities.

Human Settlement

- WG.4.16 Describe and explain the worldwide trend toward urbanization and be able to graph the trend. (Individuals, Society and Culture)
- WG.4.17 Explain how the internal structures of cities varies in different regions of the world and give examples. (Individuals, Society and Culture)

Example: In France, the poor live in suburbs; in the United States, the poor live in the inner city.

WG.4.18 Analyze the changing functions of cities over time. (History; Individuals, Society and Culture)

Example: Uses of cities as transportation centers, centers of commerce, and centers of administration and government

Cooperation and Conflict

WG.4.19 Identify specific situations where human or cultural factors are involved in geographic conflict and identify different viewpoints in the conflict. Create scenarios under which these cultural factors would no longer trigger conflict. (Economics; Government; Individuals, Society and Culture)

Example: Israeli and Palestinian conflict, and Sunnis and Shiites

- WG.4.20 Identify international organizations of global power and influence (North Atlantic Treaty Organization/ NATO, the United Nations, the European Union, Association of Southeast Asian Nations/ASEAN) and report on the impact of each. (Economics, Government)
 - * push factors: the social, political, economic and environmental forces that drive people from their previous location to search for new ones.
 - * pull factors: the social, political, economic and environmental attractions that draw people to a new location.
 - * lingua franca: a widely-used second language; a language of trade and communication
 - * convergence: the process by which cultures become more alike
 - * divergence: the process by which cultures become less alike
 - * infrastructure: the basic facilities and services, such as communication and transportation systems, schools and utilities, needed for the functioning of a society or community

Standard 5 Environment and Society

Students will acquire a framework for thinking geographically about the environment and society. They will analyze ways in which humans affect and are affected by their physical environment and the changes that occur in the meaning, distribution and importance of resources.

WG.5.1 Identify and describe the effect of human interaction on the world's environment. (Economics; Government; Individuals, Society and Culture)

Example: Atmospheric and surface pollution, global warming, deforestation, desertification, salinization, over-fishing, urban sprawl, and species extinction

WG.5.2 Identify solutions to problems caused by environmental changes brought on by human activity. (Economics; Government; Individuals, Society and Culture)

WG.5.3 Map the occurrence and describe the effects of natural hazards throughout the world and explain ways to cope with them. (Government; Individuals, Society and Culture)

Example: Earthquakes, volcanic eruptions, tornadoes, flooding, hurricanes and cyclones, and lightning-triggered fires

- WG.5.4 Analyze the possible effect of a natural disaster on the local community and devise plans to cope with a disaster so as to minimize or mitigate its effects.
- WG.5.5 Describe how and why the ability of people to use Earth's resources to feed themselves has changed over time. (Economics; Government; History; Individuals, Society and Culture)

Example: Advances in technology such as irrigation, hybridization, and crop rotation

WG.5.6 Identify patterns of world resource distribution and utilization, and explain the consequences of the use of renewable and nonrenewable resources. (Economics; Individuals, Society and Culture)

Example: Nonrenewable resources such as the distribution of fossil fuels, natural gas and oil; renewable sources such as timberland, water and fish; and the relationship to scarcity

- WG.5.7 Identify examples from different world regions, involving the use and management of resources. Explain how different points of view influence policies relating to the use of these resources. (Economics; Government; Individuals, Society and Culture)
- WG.5.8 Create basic policies designed to guide the use and management of Earth's resources and that reflect multiple points of view.